

Title (en)

Heat exchanger unit for a combustion engine

Title (de)

Wärmeübertragungseinheit für eine Verbrennungskraftmaschine

Title (fr)

Echangeur de chaleur pour un moteur à combustion interne

Publication

EP 2031336 A3 20110518 (DE)

Application

EP 08104442 A 20080617

Priority

DE 102007041338 A 20070831

Abstract (en)

[origin: EP2031336A2] The unit for the cooling of exhaust gases has a surface is arranged between a cooling fluid and a flow channel (2) having bounding walls (6, 10) in a first section (9) which is greater than in a second section (12). Ribs (14) provided over the length of the channel (2) are distributed so that a cross-section of the flow channel are less than or equal to the flow channel cross section in the second section (12).

IPC 8 full level

F28F 3/04 (2006.01); **F02M 25/07** (2006.01); **F28D 7/10** (2006.01); **F28D 9/00** (2006.01); **F28F 13/08** (2006.01); **F28F 13/14** (2006.01)

CPC (source: EP US)

F02M 26/32 (2016.02 - EP US); **F28D 7/106** (2013.01 - EP US); **F28D 9/0031** (2013.01 - EP US); **F28F 3/048** (2013.01 - EP US); **F28F 13/08** (2013.01 - EP US); **F28F 13/14** (2013.01 - EP US); **F28D 21/0003** (2013.01 - EP US)

Citation (search report)

- [A] DE 102005029321 A1 20061228 - BEHR GMBH & CO KG [DE]
- [A] DE 10112257 A1 20011031 - DENSO CORP [JP]
- [AP] EP 1870655 A2 20071226 - PIERBURG GMBH [DE]
- [A] JP 2001027157 A 20010130 - MITSUBISHI MOTORS CORP
- [A] DE 202006009464 U1 20060914 - PIERBURG GMBH [DE]

Designated contracting state (EPC)

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DOCDB simple family (publication)

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DOCDB simple family (application)

DE 102007041338 A 20070831; EP 08104442 A 20080617; US 20272708 A 20080902